IN THE CLAIMS

1. (currently amended) An electronic apparatus comprising

a digital camera having a camera lens;

a fingerprint reading unit having a stamping area comprising a semi-transparent film; and

an optical system positioned in the fingerprint reading unit and comprising a corrective lens additional to ~~any~~ the camera lens incorporated in the digital camera,

in which the fingerprint reading unit is operative to direct an image of an object on the stamping area through the ~~lens system~~lenses for capture by the digital camera.

2. (currently amended) The electronic apparatus of claim 1 in which the corrective lens ~~of the optical system~~ has a configuration adapted to implement hyperopia correction to the image.

3. (canceled)

4. (original) The electronics apparatus of claim 1 in which the fingerprint reading unit further comprises a source of light and a prism adapted to direct the light from the source onto the stamping area.

5. (original) The electronics apparatus of claim 4 in which the fingerprint reading unit further comprises a light shield operative to block a peripheral portion of the light from the source from reaching the digital camera.

6. (original) The electronics apparatus of claim 4 in which the source of light comprises a window adapted to admit external ambient light into the fingerprint reading unit.

7. (original) The electronics apparatus of claim 4 in which the source of light is positioned within the fingerprint reading unit.

8. (original) The electronics apparatus of claim 7 in which the source of light is activated when an object makes contact with the stamping area.

9. (original) The electronics apparatus of claim 8 in which the source of light comprises a light-emitting polymer film which emits light in response to pressure from contact by an object against the polymer film.

10. (currently amended) The electronics apparatus of claim 1 in which the optical system further comprises a pinhole diaphragm positioned between the corrective lens of the optical system and ~~a lens of the digital camera~~ the camera lens.

11. (original) The electronic apparatus of claim 1 in which the apparatus comprises a portable digital computer.

12. (original) The electronic apparatus of claim 1 in which the apparatus comprises a wireless telephone.

13. (currently amended) A fingerprint reading and authentication method comprising the steps of

providing an electronic apparatus comprising a digital camera, and a fingerprint reading unit having a stamping area comprising a semi-transparent film,

capturing into the digital camera a fingerprint image of a finger in contact with the stamping area,

extracting information from the fingerprint image which uniquely characterizes the fingerprint image,

comparing the information extracted which the fingerprint image to pre-registered fingerprint image data,

authenticating whether the fingerprint image is the same as any image contained in the pre-registered fingerprint image data.

14. (original) The fingerprint reading and authentication method of claim 13 in which the electronic apparatus further comprises a security system adapted to render the electronics apparatus inoperable when activated, and in which the method further comprises the step of activating the security system to bar access of a user of the electronics apparatus unless the authenticating step verifies that the fingerprint image is the same as an image contained in the pre-registered fingerprint image data.

15. (original) The fingerprint reading and authentication method of claim 13 which further comprises the steps of

correcting the fingerprint image obtained from the digital camera to remove distortion caused by optics of the digital camera, thereby forming a cleaned fingerprint image, and

using the cleaned fingerprint image for extracting, comparing and authenticating with the pre-registered fingerprint image data.

16. (original) The fingerprint reading and authentication method of claim 15 in which correcting the fingerprint image obtained from digital camera comprises (a) determining a Fourier transform function which characterizes the distortion between a precise image of a subject and an image of the subject produced by the digital camera, (b) applying an inverse Fourier transform process to the fingerprint image obtained from the digital

camera using the Fourier transform function determined in step (a) to form the cleaned fingerprint image.

17. (currently amended) The fingerprint reading and authentication method of claim 15 in which the pre-registered fingerprint image data is obtained by an apparatus comprising

a digital camera having a camera lens,

a fingerprint reading unit having a stamping area; and an optical system positioned in the fingerprint reading unit, in which the fingerprint reading unit is operative to direct an image of an object on the stamping area through the optical system for capture by the digital camera, and in which the optical system comprises a corrective lens adapted to implement hyperopia correction to the fingerprint image, the corrective lens being additional to ~~any~~ the camera lens incorporated in the digital camera.